



PERGAMON

Accident Analysis and Prevention 34 (2002) III–VIII

ACCIDENT  
ANALYSIS  
&  
PREVENTION

www.elsevier.com/locate/aap

## Volume 34, 2002

### LIST OF CONTENTS

#### NUMBER 1

##### *Papers*

- Femur fractures in relatively low speed frontal crashes: the possible role of muscle forces**  
Allan F. Tencer, Robert Kaufman, Kathy Ryan, David C. Grossman, M. Brad Henley, Fred Mann, Charles Mock, Fred Rivara, Stewart Wang, Jeffery Augenstein, David Hoyt, Brent Eastman and Crash Injury Research and Engineering Network (CIREN) 1
- Freeway speed limits and traffic fatalities in Washington State**  
Eric M. Ossiander and Peter Cummings 13
- Effects of work zone presence on injury and non-injury crashes**  
Asad J. Khattak, Aemal J. Khattak and Forrest M. Council 19
- An alternative accident prediction model for highway-rail interfaces**  
Ross D. Austin and Jodi L. Carson 31
- Stop, look, listen, and think?: What young children really do when crossing the road**  
M. Suzanne Zeedyk, Linda Wallace and Linsay Spry 43
- An instrumented vehicle assessment of problem behavior and driving style: Do younger males really take more risks?**  
Thomas E. Boyce and E. Scott Geller 51
- Injuries associated with inline skating in the European region**  
Saakje Mulder and Annemiek Hutten 65
- Risk factors for fatal road traffic accidents in Udine, Italy**  
Francesca Valent, Flavio Schiava, Cecilia Savonitto, Tolinda Gallo, Silvio Brusaferrero and Fabio Barbone 71
- Age of drinking onset, driving after drinking, and involvement in alcohol related motor-vehicle crashes**  
Ralph Hingson, Tim Heeren, Suzette Levenson, Amber Jamanka and Robert Voas 85
- Car size and injury risk: a model for injury risk in frontal collisions**  
Denis P. Wood and Ciaran K. Simms 93
- The effect of population safety belt usage rates on motor vehicle-related fatalities**  
Richard A. Derrig, Maria Segui-Gomez, Ali Abtahi and Ling-Ling Liu 101
- The effect on accident risk of a change in driver education in Denmark**  
Gitte Carstensen 111

*Short communication*

- Incidence and causes of home accidents at Ankara Çigiltepe apartments in Turkey**  
Onur Hamzaoglu, Özlem Özkan and Staffan Janson 123

## NUMBER 2

*Papers*

- Speed and safety effect of photo radar enforcement on a highway corridor in British Columbia**  
Greg Chen, Wayne Meckle and Jean Wilson 129
- Predicting seat belt use in fatal motor vehicle crashes from observation surveys of belt use**  
Philip Salzberg, Anna Yamada, Charlie Saibel and John Moffat 139
- Impact of roadside features on the frequency and severity of run-off-roadway accidents: an empirical analysis**  
Jinsun Lee and Fred Mannering 149
- Rollover risk of cars and light trucks after accounting for driver and environmental factors**  
Charles M. Farmer and Adrian K. Lund 163
- Evaluation of a combined brake–accelerator pedal**  
Rickard Nilsson 175
- Role of drivers' personal characteristics in understanding traffic sign symbols**  
Hashim Al-Madani and Abdul Rahman Al-Janahi 185
- Effects of daytime running lights on multiple-vehicle daylight crashes in the United States**  
Charles M. Farmer and Allan F. Williams 197
- Pedestrian–vehicle crashes and analytical techniques for stratified contingency tables**  
Ali S. Al-Ghamdi 205
- Changes in crash risk following re-timing of traffic signal change intervals**  
Richard A. Retting, Janella F. Chapline and Allan F. Williams 215
- The relationship between body weight and risk of death and serious injury in motor vehicle crashes**  
Charles N. Mock, David C. Grossman, Robert P. Kaufman, Christopher D. Mack and Frederick P. Rivara 221
- Anger and aggression among drivers in three European countries**  
Dianne Parker, Timo Lajunen and Heikki Summala 229
- Evaluating the crash and citation rates of Utah drivers licensed with medical conditions, 1992–1996**  
Donald D. Vernon, Edna M. Diller, Lawrence J. Cook, James C. Reading, Anthony J. Suruda and J. Michael Dean 237
- The neck injury criterion: future considerations**  
Arthur C. Croft, Patti Herring, Michael D. Freeman and Michael T. Haneline 247
- Short communication*
- Previous convictions or accidents and the risk of subsequent accidents of older drivers**  
Geneviève Daigneault, Pierre Joly and Jean-Yves Frigon 257

## NUMBER 3

*Papers*

- Vehicle action: effective policy for controlling drunk and other high-risk drivers?**  
Robert B. Voas and David J. DeYoung 263
- An exploratory study of the relationship between road rage and crash experience in a representative sample of US drivers**  
Elisabeth Wells-Parker, Jennifer Ceminsky, Victoria Hallberg, Ronald W. Snow, Gregory Dunaway, Shawn Guiling, Marsha Williams and Bradley Anderson 271
- Characteristics of traffic crashes in Maryland (1996–1998): differences among the youngest drivers**  
Michael F. Ballesteros and Patricia C. Dischinger 279
- A comparison of safety belt use between commercial and noncommercial light-vehicle occupants**  
David W. Eby, Tiffani A. Fordyce and Jonathon M. Vivoda 285
- Toll road crashes of commercial and passenger motor vehicles**  
Elisa R. Braver, Mark G. Solomon and David F. Preusser 293
- Sobriety tests for low blood alcohol concentrations**  
A. James McKnight, Elizabeth A. Langston, A. Scott McKnight and James E. Lange 305
- Driver injury severity: an application of ordered probit models**  
Kara Maria Kockelman and Young-Jun Kweon 313
- International comparison of costs of a fatal casualty of road accidents in 1990 and 1999**  
Anna Trawén, Pia Maraste and Ulf Persson 323
- The antilock braking system anomaly: a drinking driver problem?**  
David W. Harless and George E. Hoffer 333
- Is the claim that 'variance kills' an ecological fallacy?**  
Gary A. Davis 343
- The effectiveness of antilock braking systems in reducing accidents in Great Britain**  
Jeremy Broughton and Chris Baughan 347
- Effects of road geometry and traffic volumes on rural roadway accident rates**  
Matthew G. Karlaftis and Ioannis Golias 357
- Multidisciplinary in-depth investigations of head-on and left-turn road collisions**  
Lotte Larsen and Peter Kines 367
- Self-reports of aberrant behaviour on the roads: errors and violations in a sample of Greek drivers**  
Tom Kontogiannis, Zoe Kossivelou and Nicolas Marmaras 381

*Short communication*

- A note on the variance of paired comparisons estimates**  
Ellen S. Hertz 401

## NUMBER 4

*Papers*

<b>Incidence and patterns of spinal cord injury in Australia</b> Peter O'Connor	405
<b>Generalised linear accident models and goodness of fit testing</b> G.R. Wood	417
<b>Drinking and driving among Mexican American and non-Hispanic white males in Long Beach, California</b> Susan A. Ferguson, Marcelline M. Burns, Dary Fiorentino, Allan F. Williams and Juan Garcia	429
<b>A study to measure the incidence of driving under suspension in the Greater Moncton area</b> J.E. Louis Malenfant, Ron Van Houten and Brian Jonah	439
<b>Evaluation of a program to motivate impaired driving offenders to install ignition interlocks</b> Robert B. Voas, Kenneth O. Blackman, A. Scott Tippetts and Paul R. Marques	449
<b>Pedestrian risk decrease with pedestrian flow. A case study based on data from signalized intersections in Hamilton, Ontario</b> Lars Leden	457
<b>Road traffic accidents in the United Arab Emirates: trends of morbidity and mortality during 1977–1998</b> Mohammed El-Sadig, J. Nelson Norman, Owen L. Lloyd, Peter Romilly and Abdulbari Bener	465
<b>Injury to the spinal cord in motor vehicle traffic crashes</b> Peter O'Connor	477
<b>The role of ambient light level in fatal crashes: inferences from daylight saving time transitions</b> John M. Sullivan and Michael J. Flannagan	487
<b>Emergency medical service rescue times in Riyadh</b> Ali S. Al-Ghamdi	499
<b>Predicted effect of automatic crash notification on traffic mortality</b> David E. Clark and Brad M. Cushing	507
<b>Modeling young driver motor vehicle crashes: data with extra zeros</b> Andy H. Lee, Mark R Stevenson, Kui Wang and Kelvin K.W. Yau	515
<b>Seat belt use among African Americans, Hispanics, and Whites</b> JoAnn K. Wells, Allan F. Williams and Charles M. Farmer	523
<b>Derivation of a clinical decision rule for whiplash associated disorders among individuals involved in rear-end collisions</b> Lisa Hartling, William Pickett and Robert J. Brison	531
<b>Differences in cause-specific patterns of unintentional injury mortality among 15–44-year-olds in income-based country groups</b> Niaz Ahmed and Ragnar Andersson	541

- Perceived risk among parents concerning the travel situation for children with disabilities**  
Torbjörn Falkmer and Nils Petter Gregersen 553

- Snowmobile fatalities: Aspects on preventive measures from a 25-year review**  
Mats Öström and Anders Eriksson 563

## NUMBER 5

*Papers*

- Sensation seeking and detection of risky road signals: a developmental perspective**  
Tova Rosenbloom and Yuval Wolf 569

- Bridge strike reduction: optimising the design of markings**  
Tim Horberry, Mark Halliday and Alastair G. Gale 581

- Driving simulator validation for speed research**  
Stuart T. Godley, Thomas J. Triggs and Brian N. Fildes 589

- Drivers' response to the installation of road lighting. An economic interpretation**  
Finn Jørgensen and Pål Andreas Pedersen 601

- Factors influential in making an injury severity difference to older drivers involved in fixed object–passenger car crashes**  
Sunanda Dissanayake and Jian John Lu 609

- Relationship between crash rate and hourly traffic flow on interurban motorways**  
Jean-Louis Martin 619

- The importance of confounding in observational before-and-after studies of road safety measures**  
Rune Elvik 631

- Characteristics of low speed accidents with buses in public transport**  
A.E. af Wählberg 637

- How the presence of passengers influences the risk of a collision with another vehicle**  
Mark Vollrath, Tobias Meilinger and Hans-Peter Krüger 649

- Individual differences during driver secondary task performance: verbal protocol and visual allocation findings**  
Terry C. Lansdown 655

- Biomechanical analyses of whiplash injuries using an experimental model**  
Narayan Yoganandan, Frank A. Pintar and Joseph F. Cusick 663

- A model of traffic crashes in New Zealand**  
P.A. Scuffham and J.D. Langley 673

- The relationship between liquor outlet density and injury and violence in New Mexico**  
Luis G. Escobedo and Melchor Ortiz 689

- Epidemiological data and ranking home and leisure accidents for priority-setting**  
Saakje Mulder, Fons Blankendaal, Ingrid Vriend, Wim Schoots and Lex Bouter 695

**Pedestrian crashes in Washington, DC and Baltimore**

David F. Preusser, JoAnn K. Wells, Allan F. Williams and Helen B. Weinstein 703

**Driving performance of drivers with impaired central visual field acuity**

Dave Lamble, Heikki Summala and Lea Hyvärinen 711

## NUMBER 6

*Papers***The independent contribution of driver, crash, and vehicle characteristics to driver fatalities**

Michel Bédard, Gordon H. Guyatt, Michael J. Stones and John P. Hirdes 717

**Using logistic regression to estimate the influence of accident factors on accident severity**

Ali S. Al-Ghamdi 729

**Traffic safety and the switch to a primary seat belt law: the California experience**

David J. Houston and Lilliard E. Richardson Jr 743

**The effect on accidents of technical inspections of heavy vehicles in Norway**

Rune Elvik 753

**Signal detection in conditions of everyday life traffic dilemmas**

Tova Rosenbloom and Yuval Wolf 763

**Further results from a trial comparing a hidden speed camera programme with visible camera operation**

Michael D. Keall, Lynley J. Povey and William J. Frith 773

**Factors influencing the probability of an incident at a junction: results from an interactive driving simulator**

Jennifer Alexander, Philip Barham and Ian Black 779

**Young drivers' decision making and safety belt use**

Fethi Calisir and Mark R. Lehto 793

**'Road rage' in Arizona: armed and dangerous**

Matthew Miller, Deborah Azrael, David Hemenway and Frederic I. Solop 807

**The effects of standard enforcement on Michigan safety belt use**

David W. Eby, Jonathon M. Vivoda and Tiffani A. Fordyce 815

**Effects of an afternoon nap on nighttime alertness and performance in long-haul drivers**

M. Mila Macchi, Ziad Boulos, Thomas Ranney, Lucinda Simmons and Scott S. Campbell 825

**Responses of teenagers and their parents to California's graduated licensing system**

Allan F. Williams, Laurie A. Nelson and William A. Leaf 835



